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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RAO, ANAND SHASHIKANT

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/870,708	Applicant(s) ESHET ET AL.	
	Examiner Andy S. Rao	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-155 is/are pending in the application.
 4a) Of the above claim(s) 61-147 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 14-18, 36-39 and 56-60 is/are rejected.
- 7) ☒ Claim(s) 7-13, 19-35, 40-55 and 148-155 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/29/01</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of the embodiment in figures 2-3 and being read on by claims 1-60 and 148-155 in the reply filed on 7/14/05 is acknowledged.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an

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international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-6, 14-18, 36-39, 56-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Girod et al., (hereinafter referred to as "Girod").

Girod discloses a method (Girod: column 20, lines 45-65; column 21, lines 1-5) for defining a compression scheme of a media stream (Girod: column 3, lines 1-15), the method comprising the steps of: determining a plurality of compression levels for the media stream and a relationship between valid values of compressed representations of the media stream (Girod: column 7, lines 55-67), each compressed representation of the media stream associated with one of the compression levels (Girod: column 7, lines 40-53); defining the highest level of compression of the compression levels as a base level (Girod: column 3, lines 15-25); and defining enhancement data for representing a relationship between valid values of the compressed representations of the media stream (Girod: column 7, lines 30-40), as in claim 1.

Regarding claim 2, Girod discloses wherein the enhancement data reflects a relationship between valid values of two successive compressed representations of the media stream (Girod: column 8, lines 60-67), as in the claim.

Regarding claim 3, Girod discloses wherein the step of defining enhancement data comprises defining enhancement data if a valid value of a compressed representation of a media stream is associated with at least two valid values of a successive compressed representation of the media stream (Girod: column 11, lines 11-30), as in the claim.

Regarding claim 4, Girod discloses wherein the media stream is defined as an original media stream (Girod: column 11, lines 40-50); and wherein a relationship between valid values of distinct compressed representations of the media stream reflect a relationship between valid values of the original media stream mapped to the valid values of distinct compressed representation of the media stream (Girod: column 8, lines 40-67), as in the claim.

Regarding claim 5, Girod discloses wherein the step of defining enhancement data relating to valid values of a pair of compressed representations of the media stream comprises checking a relationship between valid values of lower compressed representations of the media stream, lower compressed representations of the media stream being characterized by a higher compression level (Girod: column 17, lines 7-17), as in the claim.

Regarding claim 6, Girod discloses wherein the step of defining enhancement data comprises defining a p'th layer enhancement data for valid values of pair of a (p-1)'th and a p'th compressed representations of the media stream, if the reconstruction of the valid values of the p'th compressed representation of the media stream requires the p'th layer enhancement data, whereas p ranges between 2 and k, k reflects the number of compression levels (Girod: column 17, lines 7-50), as in the claim.

Regarding claim 14, Girod discloses wherein the compressed representations of the media streams are generated by applying a compression function selected from the group consisting of: sampling functions, quantizing functions, linear quantizing functions, non-linear quantizing functions, and uniform quantizing functions (Girod: column 10, lines 1-15), as in the claim.

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Regarding claim 15, Girod discloses a step of compressing the enhancement data (Girod: column 7, lines 30-35), as in the claim.

Regarding claim 16, Girod discloses wherein enhancement data includes enhancement data symbols; and wherein the method further comprising a step of variable length encoding the enhancement data symbols to provide enhancement data code words (Girod: column 2, lines 28-32), as in the claim.

Regarding claim 17, Girod discloses wherein said media stream comprises one of the list consisting of: MPEG compliant media stream, original media stream, JPEG media stream, video stream, audio stream, data stream, H.261 compliant media stream, H.263 compliant stream, streaming media stream, JPEG stream, AC-3 audio stream, AAC audio stream, and a stream containing a plurality of streams (Girod: column 1, lines 20-30; column 3, lines 1-15 and 39-46; column 13, lines 60-67; column 14, lines 10-20), as in the claim.

Regarding claim 18, Girod discloses further comprising a step of: compressing the media stream according to the compression levels, thereby producing a plurality of compressed representations of the media stream (Girod: column 17, lines 5-15); defining a selected one of said compressed representations of the media stream a base media layer, the selected compressed version being compressed according to the base level (Girod: column 17, lines 16-40); determining if enhancement data is required for reconstructing a compressed representation of the media stream (Girod: column 7, lines 55-67); and generating enhancement data, in response to the determination (Girod: column 7, lines 30-37), as in the claim.

Girod discloses a method for generating a compressed representation of a media stream (Girod: column 20, lines 45-65; column 1-5), the media stream (Girod: column 3, lines 1-10)

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comprising a plurality of media stream symbols (Girod: column 2, lines 27-33), the method comprising the steps of: determining a plurality of compression functions of statistically distinct compression levels (Girod: column 2, lines 50-60), wherein applying a compression function on the media stream produces a compressed representation of the media stream (Girod: column 7, lines 55-65); determining a relationship between valid values of compressed representations of the media stream (Girod: column 8, lines 35-50); defining the statistically most compressed representation of the media stream as a base layer media stream (Girod: column 17, lines 5-15); defining enhancement data for representing a relationship between valid values of the compressed representations of the media stream (Girod: column 17, lines 15-23); compressing the media stream by applying the compression functions, thereby producing a plurality of compressed representations of the media stream (Girod: column 7, lines 30-40); determining if enhancement data is required for reconstructing a compressed representation of the media stream (Girod: column 8, lines 15-25); and generating enhancement data, in response to the determination (Girod: column 17, lines 50-60), as in claim 36.

Regarding claim 37, Girod discloses wherein the p'th compressed representation is characterized by a p'th statistically compression level, p ranges between 1 to k, k reflecting the amount of compression functions; and wherein the p'th compressed representation of the media stream is defined as a p'th layer media stream (Girod: column 17, lines 7-50), as in the claim.

Regarding claim 38, Girod discloses wherein the step of determining starts from the second media layer and ends at the original media stream, the original media stream is defined as the media stream (Girod: column 7, lines 35-40), as in the claim.

Regarding claim 39, Girod discloses wherein determining a necessity of enhancement data relating to symbols of a pair of compressed representations of the media stream comprises checking a relationship between symbols of lower compressed representations of the media stream, lower compressed representations of the media stream being characterized by a higher compression level (Girod: column 11, lines 10-25), as in the claim.

Regarding claim 56, Girod discloses a step of compressing the enhancement data (Girod: column 7, lines 30-35), as in the claim.

Regarding claims 57-58, Girod discloses wherein enhancement data includes enhancement data symbols, and wherein the method further comprising a step of variable length encoding the enhancement data symbols to provide enhancement data code words (Girod: column 2, lines 28-32), as in the claims.

Regarding claim 59, Girod discloses wherein said media stream comprises one of the list consisting of: MPEG compliant media stream, original media stream, JPEG media stream, video stream, audio stream, data stream, H.261 compliant media stream, H.263 compliant stream, streaming media stream, JPEG stream, AC-3 audio stream, AAC audio stream, and a stream containing a plurality of streams (Girod: column 1, lines 20-30; column 3, lines 1-15 and 39-46; column 13, lines 60-67; column 14, lines 10-20), as in the claim.

Regarding claim 60, Girod discloses a step of encrypting the base media layer, whereas the base media layer and the enhancement data defining an encrypted representation of the media stream (Girod: column 12, lines 15-25), as in the claim.

Allowable Subject Matter

5. Claims 7-13 are objected to as being dependent upon a rejected base claim, but would be allowable if the claims 7-13 are rewritten in independent form including all of the limitations of the base claim 1 and intervening claim 6.

6. Claims 19-35, 149-155 are objected to as being dependent upon a rejected base claim, but would be allowable if the claims 19-21 and 31-35 are rewritten in independent form including all of the limitations of the base claim 1 and intervening claim 18.

7. Claims 40-55 are objected to as being dependent upon a rejected base claim, but would be allowable if claim 40 is rewritten in independent form including all of the limitations of the base claim 36.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Boyce discloses a method and apparatus for transmitting MPEG video over the internet. Slowe discloses a method and apparatus for automatic cross-media selection and scaling.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andy S. Rao
Primary Examiner
Art Unit 2613

asr
September 30, 2005

ANDY RAO
PRIMARY EXAMINER

